

KINWA
金和車床

高速 / 中型精密車床 HIGH SPEED / MEDIUM PRECISION LATHE

CH / CHD series

www.kinwa-lathe.com

KINWA
金和車床

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精度準確 品質卓越
SUPREME ACCURACY. EXCELLENT QUALITY.

高剛性·精密結構

精密加工·重切削之首選機種

無論您的加工需求是精密加工或重切削，金和CH及CHD系列精密車床，絕對可徹底滿足您的期許。金和車床所獨具的結構剛性與穩定性，特別是在重切削時，更凸顯其非凡的加工能力與精度。每台機器出廠前的嚴格檢驗與測試，將充分反映在機器的操作性能。

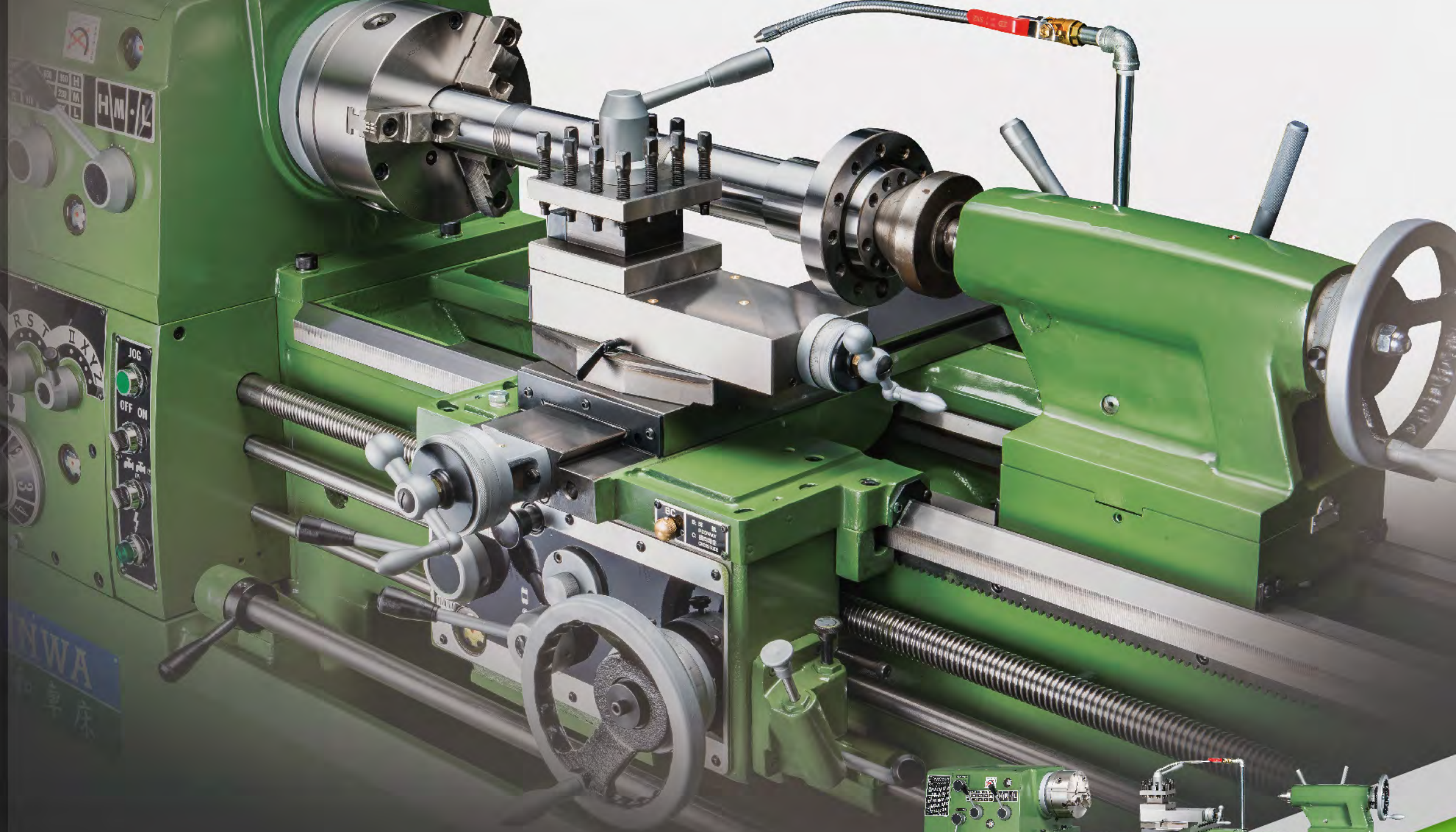
HIGHLY RIGID, PRECISE STRUCTURE

Your First Choice in Precision Machining And Heavy Cutting

Whether your requirements are precision machining or heavy cutting, the CH and CHD series precision lathes from KINWA will fully satisfy your expectations. With the unique structural rigidity and stability, KINWA lathes will exhibit exceptional machining capacity and accuracy, especially when performing heavy cutting. Each machine is subject to rigorous inspection and testing prior to shipping, which will be thoroughly reflected on the operational performance.

易學、易操作 可快速上手

EASY TO LEARN AND OPERATE. GET STARTED QUICKLY.



CH series



CHD series



高速精密車床 HIGH SPEED PRECISION LATHE

具有圓弧形造型設計的金和CH系列車床，
以穩重、高剛性的機體結構，展現獨特加工穩定性。

With circular shaped design, KINWA CH series high speed
lathe features extremely stable and rigid machine structure.
This leads to an unmatched stability in machining.

- 床面上旋徑: 406 / 432 / 532 mm
- 兩頂心間距離: 767 / 1067 / 1667 mm
- 主軸孔徑: Ø51 / Ø58 / Ø78 mm
- 主軸轉速:
 - 70~1800 r.p.m. (Ø51 mm 孔徑)
 - 35~2000 r.p.m. (Ø58 mm 孔徑)
 - 29~1650 r.p.m. (Ø78 mm 孔徑)

- Swing over bed: 406 / 432 / 532 mm.
- Distance between centers: 767 / 1067 / 1667 mm.
- Spindle bore: Ø51 / Ø58 / Ø78 mm.
- Spindle speeds:
 - 70~1800 r.p.m. (Ø51 mm spindle bore)
 - 35~2000 r.p.m. (Ø58 mm spindle bore)
 - 29~1650 r.p.m. (Ø78 mm spindle bore)



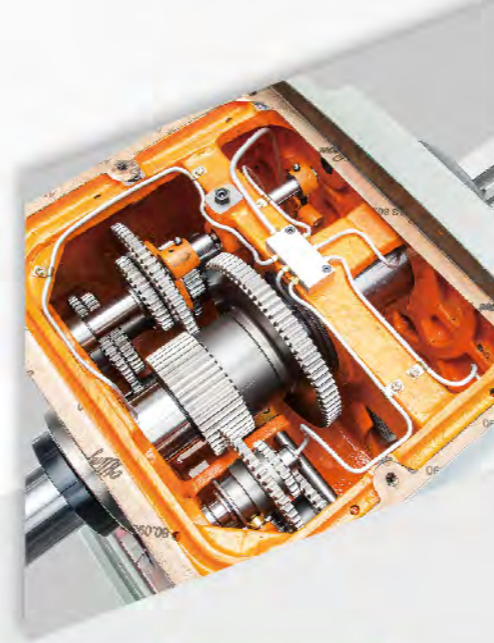
**BUILT TO DELIVER EASY,
FAST AND HIGH PRECISION
CUTTING PERFORMANCE**



H4刀座 / H4 TOOL POST

- H4刀塔可安裝外徑刀、內徑刀、切槽刀、車牙刀。
- 方形刀柄尺寸: 20 x 20 mm (CH-400)
25 x 25 mm (CH-430 / 530)

- The H4 turret accommodates O.D. tool, I.D. tool, grooving tool and threading tool.
- Square tool shank sizes: 20 x 20 mm (CH-400)
25 x 25 mm (CH-430 / 530)



主軸箱 / HEADSTOCK

- 高剛性主軸箱結構。在高速加工時，展現最佳穩定性。
- 使用高精度之JIS一級齒輪，運轉順暢。
- 主軸箱潤滑為油浴式及泵浦強制潤滑系統。

- The highly rigid headstock construction features maximum stability in high speed machining.
- The use of JIS class-1 gears assures smooth running.
- Headstock lubrication employs an oil bath and forced lubrication system.



主軸 / SPINDLE

- 主軸採用P級斜度滾柱軸承。重切削時，穩定性優異。
- P5級主軸軸承為選配。
- 多種主軸鼻端型式供選擇。
- 圖示主軸結構僅供參考，各機種均有專屬之主軸。

- The spindle runs in P class taper roller bearing that exhibits outstanding stability in heavy cutting.
- Class P5 spindle bearings are optional.
- Various types of spindle noses to select.
- The spindle structure shown as above is for reference only. Each model has its own spindle type.



床護 / APRON

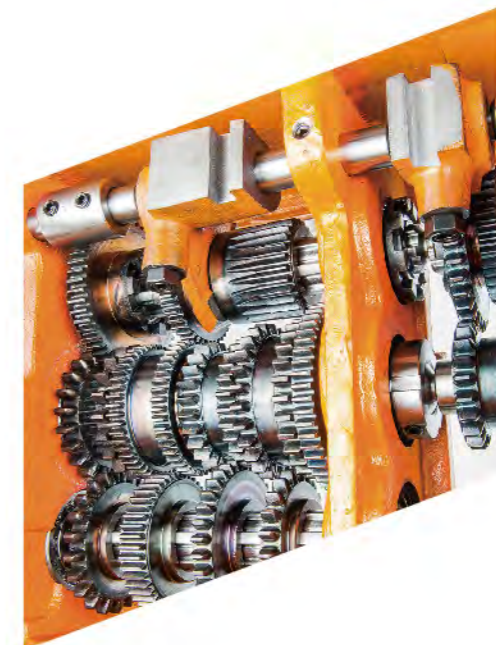
- 具有進刀互鎖功能，可避免自動進刀與螺紋切削同動。
- 油浴式潤滑。
- 配置手動自動兩用給油泵浦，提供橫向滑座及床軌之潤滑。
- 附有過負載保護裝置，以確保安全。
- 進刀為可調式。

- The foolproof feed lock function makes it possible to engage the power feed simultaneously with thread cutting.
- Oil bath lubrication.
- Equipped with a manual, automatic combined lubrication pump for lubricating across slideways and bedways.
- Equipped with an overload protection device for safety.
- Feed is adjustable

尾座 / TAILSTOCK

- 尾座軸管徑經滲碳處理及精密研磨。並具有公/英制刻度。

- The tailstock quill is carburized and precision ground with graduation in inch and metric scales.



齒輪箱 / GEAR BOX

- 公、英制螺紋共用齒輪箱。
- 附有過負荷折斷安全梢。
- 油浴式潤滑。

- Metric and inch threads combination gearbox.
- Equipped with a shear pin for overload protection.
- Oil bath lubrication



中型精密車床 MEDIUM PRECISION LATHE

金和CHD系列中型車床擁有穩重的床身結構，床身寬度400 mm。主軸孔徑為Ø86 mm及Ø104 mm，是中型工件加工之首選。

KINWA CHD series medium precision lathe is built with a massive bed with 400 mm of bed width. The series of lathe is designed with an extra large spindle bore of Ø86 mm or Ø104 mm, making it the first choice in medium-sized part machining.

- 床面上旋徑: 560 / 660 / 760 mm
- 兩頂心間距離: 808~3983 mm
- 主軸孔徑: Ø86 / Ø104 mm
- 主軸轉速: 13~1200 r.p.m. (4P)
8~800 r.p.m. (6P)
- Swing over bed: 560 / 660 / 760 mm.
- Distance between centers: 808~3983 mm.
- Spindle bore: Ø86 / Ø104 mm.
- Spindle speeds: 13~1200 r.p.m. (4P)
8~800 r.p.m. (6P)

齒輪箱 / GEAR BOX

- 公/英制螺紋共用齒輪箱。
- 附有過負荷折斷安全梢。
- 油浴式潤滑。
- Metric and inch threads combination gearbox.
- Equipped with a shear pin for overload protection.
- Oil bath lubrication.

主軸 / SPINDLE

- 主軸為三點支撐設計。
- 主軸採用P級斜度滾柱軸承。重切削時，穩定性優異。
- 多種主軸鼻端型式供選擇。
- The spindle is supported at 3 points.
- The spindle runs P class taper roller bearings that exhibit outstanding stability in heavy cutting.
- Various types of spindle noses to select.

主軸箱 / HEADSTOCK

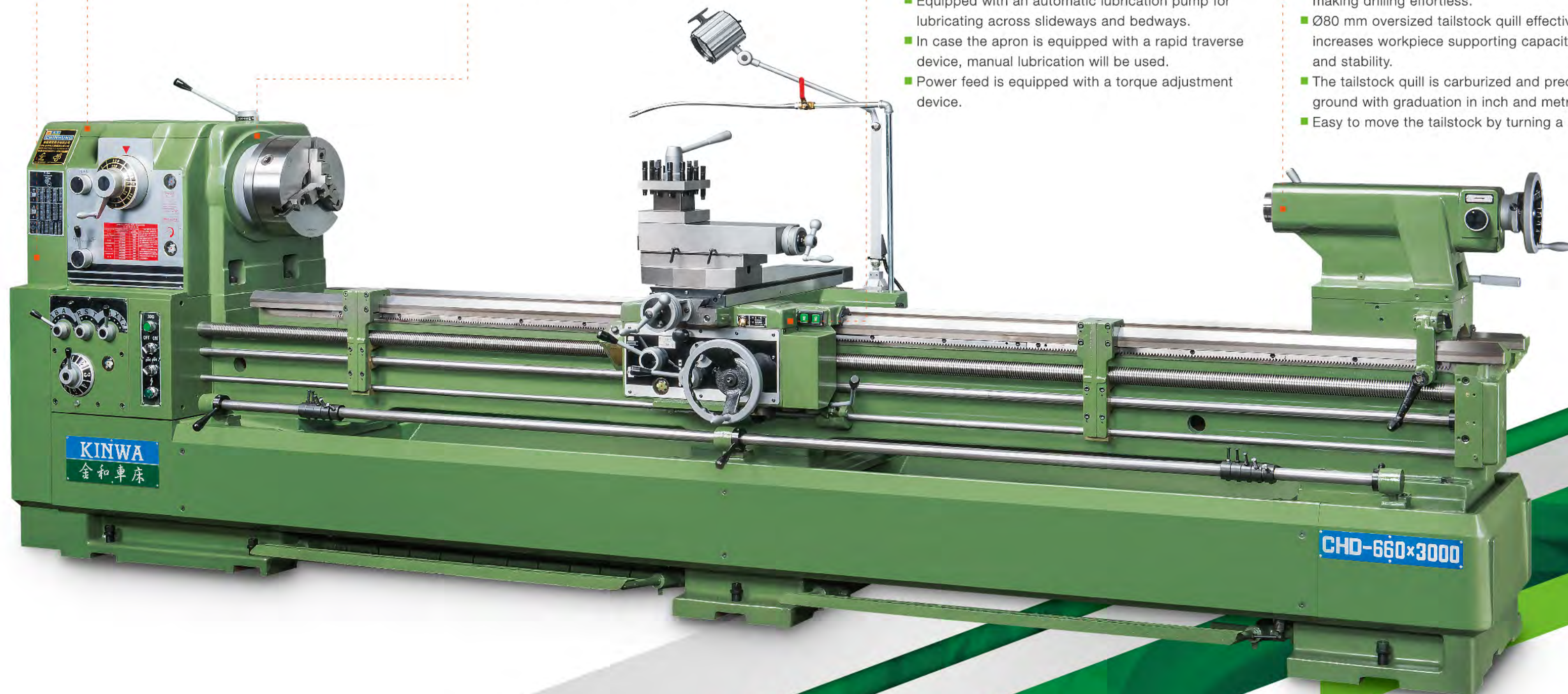
- 主軸箱內部齒輪採用合金鋼製成，經滲碳處理，再精密研磨。
- 使用高精度之JIS一級齒輪，運轉順暢。
- 主軸箱潤滑為油浴式及泵浦強制潤滑系統。
- All gears in the headstock are manufacturing from alloy steel, carburized and precision ground.
- The use of JIS class 1 gears assures smooth running.
- Headstock lubrication employs an oil bath and forced lubrication system.

床護 / APRON

- 具有進刀互鎖功能，可避免自動進刀與螺紋切削同動。
- 油浴式潤滑。
- 配置自動給油泵浦，提供縱向及橫向滑動面之潤滑。
- 床護加裝快送時，則使用手動潤滑給油裝置。
- 自動進刀附有扭力調整裝置。
- The foolproof feed lock function makes it impossible to engage the power feed simultaneously with thread cutting.
- Oil bath lubrication.
- Equipped with an automatic lubrication pump for lubricating across slideways and bedways.
- In case the apron is equipped with a rapid traverse device, manual lubrication will be used.
- Power feed is equipped with a torque adjustment device.

尾座 / TAILSTOCK

- 尾座軸管手動進給經由1:1或1/4:1齒輪傳動，使鑽孔更輕鬆、不費力。
- Ø80 mm大直徑尾軸管，有效提升工作支撐力及穩定性。
- 尾軸管經滲碳處理及精密研磨。並具有公/英制刻度。
- 尾座移動只需轉動把手。
- Manual feed of tailstock quill is transmitted through 1:1 or 1/4:1 speed reduction, making drilling effortless.
- Ø80 mm oversized tailstock quill effectively increases workpiece supporting capacity and stability.
- The tailstock quill is carburized and precision ground with graduation in inch and metric scales.
- Easy to move the tailstock by turning a handle.

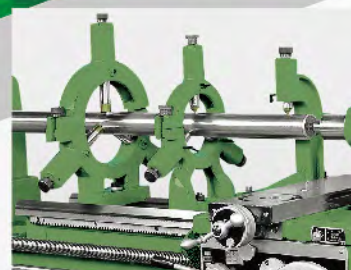


整機皆是台灣生產製造
 Entire Machines are
 Manufactured in Taiwan

高速車床特別配件 OPTIONAL ACCESSORIES FOR LATHE



快速變換刀架
 Quick change toolpost



中心架 / 跟刀架
 Steady rest / Follow rest



普通三爪夾頭
 3-Jaw scroll chuck



強力三爪夾頭
 3-Jaw strong scroll chuck



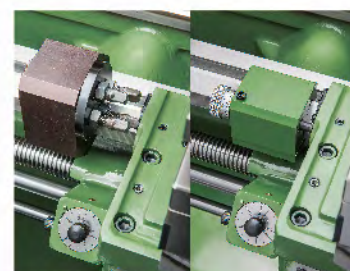
四爪夾頭
 4-Jaw independent chuck



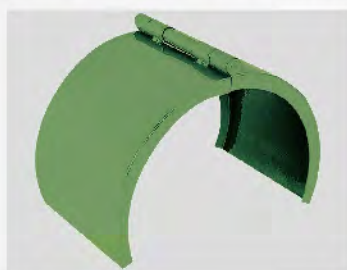
花盤
 Face plate



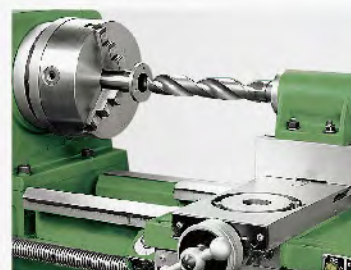
擋料塊
 Stop block



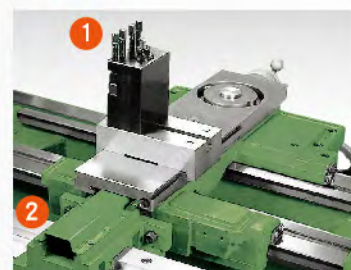
四段定位裝置 / 單段微調定位裝置
 4-position carriage stop /
 Micro carriage stop



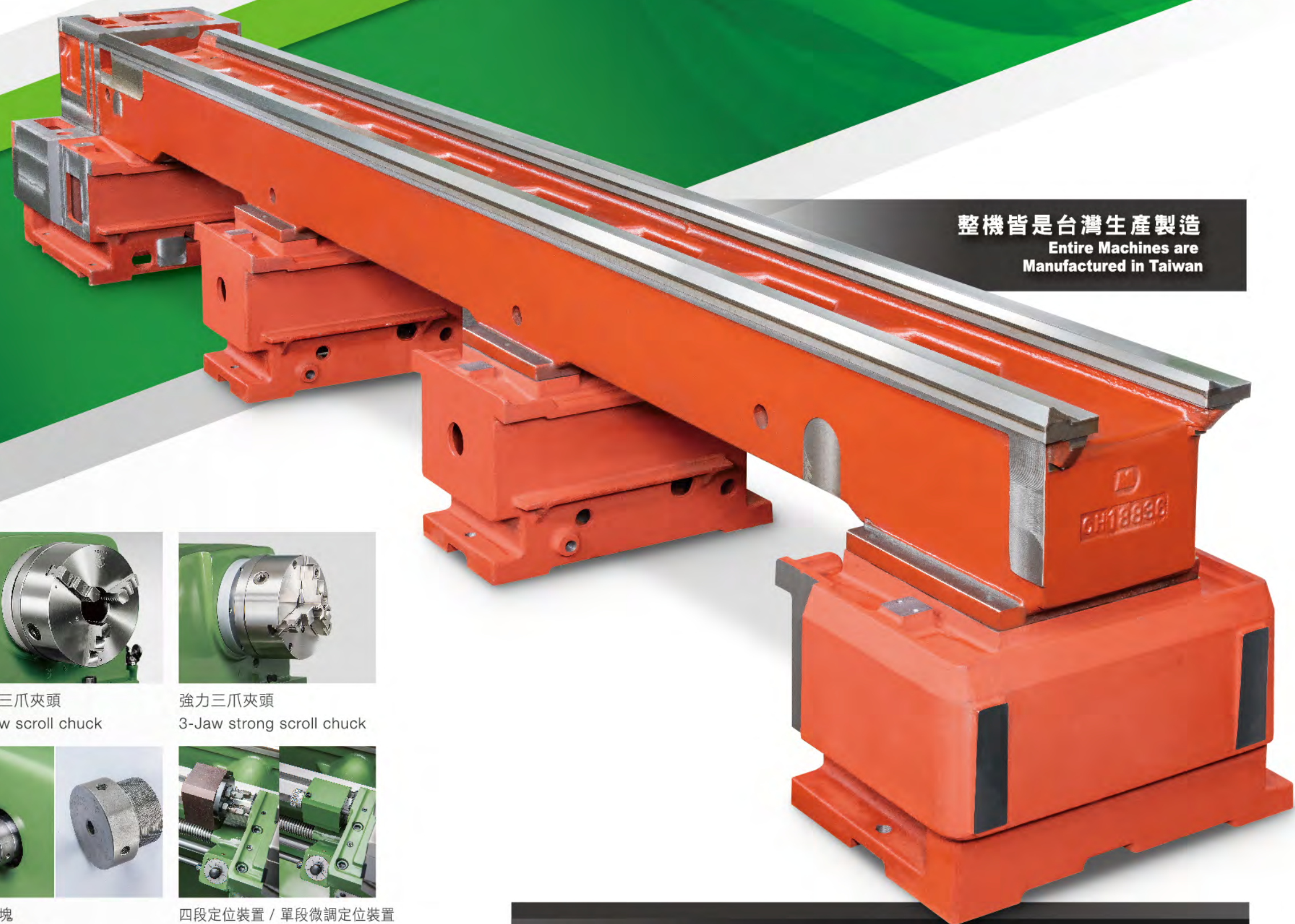
夾頭蓋
 Chuck guard



鑽孔裝置
 Drill attachment



1. 後刀架
 Rear toolpost
 2. 斜度附件
 Taper turning attachment



床身 BED

- 床身採用高級鑄鐵製成，並經應力消除。多年使用後，床身仍無變形之慮。
- 床身滑道經熱處理硬化 (硬度高達HS70°)，再經精密研磨，具有優異的耐磨耗性。

- The bed is manufactured from high quality cast iron, and stress relieved for deformation-free performance year after year.
- Bed slideways are hardened (hardness HS70°) and precision ground, featuring outstanding wear-resistance.

機械規格 SPECIFICATIONS

CH series

項目 ITEM		CH-400	CH-430	CH-530	
加工能力 Capacity	床面上旋徑	Swing over bed	406 mm	432 mm	532 mm
	鞍面上旋徑	Swing over carriage	238 mm	268 mm	368 mm
	凹口上旋徑	Swing over gap	580 mm	610 mm	710 mm
	車床可車削最大直徑	Max. turning diameter	385 mm	385 mm	385 mm
	從面板上算起凹口長度	Width of gap in front of face plate		150 mm	
	兩心間距離	Distance between centers (A1-6, A2-6)	767, 1067, 1667 mm		
	床面寬度	Width of bed	300 mm		
	車刀台行程	Stroke of tool post	145 mm		
	橫向滑座行程	Stroke of cross slide	265 mm		
	主軸箱 Headstock	主軸孔徑	Spindle bore	51 mm	58 mm (78 mm 選配 opt.)
主軸孔及中心針斜度		Taper of spindle bore & center	MT6 x MT4		
主軸鼻端		Spindle nose	A1-6, D1-6 (A2-6, D2-6, D1-8 選配 opt.)		
主軸速度變換數		Number of spindle speeds	8	12	
主軸速度		Spindle speed (60 Hz)	70, 110, 180, 290, 430, 690, 1125, 1800 r.p.m.	Ø58 mm: 35, 52, 75, 110, 160, 230, 330, 490, 650, 950, 1350, 2000 r.p.m. Ø78 mm: 29, 43, 62, 90, 130, 190, 275, 405, 540, 790, 1120, 1650 r.p.m.	
螺紋和進給 Threading & feeds	進給變換數	Number of feeds	36		
	縱向進給範圍 (公制)	Range of longitudinal feeds (metric)	0.07~0.50 mm/rev	0.037~1.04 mm/rev (P=6 mm) 0.035~0.98 mm/rev (4 TPI)	
	橫向進給範圍	Range of cross feeds	1/2 縱向進給 Half of longitudinal feeds		
	導螺桿直徑	Leadscrew diameter	35 mm		
	導螺桿範圍	Leadscrew pitch	4 TPI, P=6 mm		
尾座 Tailstock	英制螺紋範圍	Range of inch pitches	4~42 TPI (36 kinds)	2~72 TPI (44 kinds)	
	公制螺紋範圍	Range of metric pitches	0.4~7.0 mm (36 kinds)	0.2~14 mm (39 kinds)	
馬達 Motor	心軸移動量	Quill stroke	170 mm		
	心軸直徑	Quill diameter	60 mm		
機械尺寸 Machine dimension	心軸斜度	Quill taper	MT#4		
	主軸馬達	Main motor (30 min.)	5 HP (7.5 HP 選配 opt.)		
機械尺寸 Machine dimension	切削液馬達	Coolant pump motor	1/8 HP		
	機械高度	Height	1400 mm		
機械尺寸 Machine dimension	佔地面積	Floor space	2000, 2300, 2900 x 1000 mm		
	機械重量	Weight	1450, 1550 kgs	1500, 1600, 1800 kgs	1600, 1700, 1900 kgs

以上規格如有變更，恕不另行通知。 Specification are subject to change without notice.

標準配備 STANDARD ACCESSORIES

- 9"三爪夾頭及連接盤
- 水平調整螺絲
- 調整工具及工具箱
- 馬達 5 HP / 4 P
- 中心架
- 切削油裝置
- 縱送多段自動定寸裝置
- 工作燈
- 9" 3-jaw chuck with back plate
- Leveling screws
- Service kits & tool box
- Main motor 5 HP / 4 P
- Steady rest
- Coolant system
- Multi-position length stop
- Work light

選購配備 OPTIONAL ACCESSORIES

- 跟刀架
- 面板 (350 mm)
- 四段定位裝置
- 斜度附件
- 三爪夾頭
- 四爪夾頭
- 後刀架
- 馬達 7.5 HP / 4 P
- 大擋板
- 鑽孔裝置
- 主軸孔徑 78 mm 搭配 10"三爪夾頭及連接盤 (CH-430 / CH-530機型)
- 光學尺
- 主軸套筒MT6 x MT4
- 中心針 (MT4) 2只
- Follow rest
- Face plate (350 mm)
- 4-position carriage stop
- Taper turning attachment
- 3-jaw chuck
- 4-jaw independent chuck
- Rear toolpost
- Main motor 7.5 HP / 4 P
- Full length splash guard
- Drill attachment
- Spindle bore 78 mm with 10" 3-jaw chuck & back plate (for CH-430 / CH-530)
- Digital read out
- Center sleeve MT6 x MT4
- Dead center (MT4) 2 pcs

CHD series

項目 ITEM		CHD-560	CHD-660	CHD-760	
加工能力 Capacity	床面上旋徑	Swing over bed	560 mm	660 mm	760 mm
	鞍面上旋徑	Swing over carriage	340 mm	445 mm	548 mm
	凹口上旋徑	Swing over gap	797 mm	892 mm	990 mm
	車床可車削最大直徑	Max. turning diameter	622 mm	622 mm	592 mm
	從面板上算起凹口長度	Width of gap in front of face plate		270 mm	
	兩心間距離	Distance between centers (A1-6, A2-6)	808, 1443, 2218, 2968, 3983 mm		
	床面寬度	Width of bed	400 mm		
	車刀台行程	Stroke of tool post	242 mm		
	橫向滑座行程	Stroke of cross slide	400 mm		
	主軸箱 Headstock	主軸孔徑	Spindle bore	86 mm (104 mm 選配 opt.)	104 mm
主軸孔及中心針斜度		Taper of spindle bore & center	MT7 x MT5		
主軸鼻端		Spindle nose	A1-8, D1-8 (A2-8, D2-8, D1-11 選配 opt.)	A2-8, D2-8, D1-11	
主軸速度變換數		Number of spindle speeds	12		
主軸速度		Spindle speed (60 Hz)	4P: 13, 20, 30, 47, 70, 105, 150, 230, 340, 530, 800, 1200 rpm 6P: 8, 13, 20, 31, 47, 70, 100, 150, 230, 350, 530, 800 r.p.m.		
螺紋和進給 Threading & feeds	進給變換數	Number of feeds	36		
	縱向進給範圍 (公制)	Range of longitudinal feeds (metric)	0.037~1.04 mm/rev (P=6 mm, 12 mm) 0.035~0.98 mm/rev (4 TPI, 2 TPI)		
	橫向進給範圍	Range of cross feeds	1/2 縱向進給 Half of longitudinal feeds		
	導螺桿直徑	Leadscrew diameter	45 mm		
	導螺桿範圍	Leadscrew pitch	4 TPI, P=6 mm (2 TPI, P=12 mm)		
尾座 Tailstock	英制螺紋範圍	Range of inch pitches	2~72 TPI / 44 kinds (1~42 TPI / 48 kinds)		
	公制螺紋範圍	Range of metric pitches	0.2~14 mm / 39 kinds (0.4~28 mm / 44 kinds)		
馬達 Motor	心軸移動量	Quill stroke	250 mm		
	心軸直徑	Quill diameter	80 mm		
機械尺寸 Machine dimension	心軸斜度	Quill taper	MT#5		
	主軸馬達	Main motor (30 min.)	10 HP / 4HP	7.5 HP / 6P	
機械尺寸 Machine dimension	切削液馬達	coolant pump motor	1/8 HP		
	機械高度	Height	1500 mm		
機械尺寸 Machine dimension	佔地面積	Floor space	2300, 2900, 3700, 4500, 5500 x 1200 mm		
	機械重量	Weight	2300, 2400, 2900, 3100, 3600 kgs	2400, 2500, 3000, 3200, 3700 kgs	2600, 2700, 3200, 3400 kgs

以上規格如有變更，恕不另行通知。 Specification are subject to change without notice.

標準配備 STANDARD ACCESSORIES

- 10"三爪夾頭及連接盤 (Ø86孔)
- 12"三爪夾頭及連接盤 (Ø104孔)
- 水平調整螺絲
- 調整工具及工具箱
- 馬達 10 HP / 4 P
- 馬達 7.5 HP / 6 P (CHD-760)
- 中心架 40~255 mm
- 切削油裝置
- 縱送多段自動定寸裝置
- 床護快送 (2300, 3000, 4000車床用)
- 工作燈
- 10" 3-jaw chuck with back plate for Ø86 mm
- 12" 3-jaw chuck with back plate for Ø104 mm
- Leveling screws
- Service kits & tool box
- Main motor 10 HP / 4 P
- Main motor 7.5 HP / 6 P for CHD-760
- Steady rest 40~255 mm
- Coolant system
- Multi-position length stop
- Rapid traverse for 2300, 3000, 4000
- Work light

選購配備 OPTIONAL ACCESSORIES

- 跟刀架
- 面板 (500 mm)
- 四段定位裝置
- 斜度附件
- 四爪夾頭
- 中心架 190~405 mm
- 光學尺
- 大擋板
- 主軸套筒MT7 x MT5
- 中心針 (MT5) 2只
- Follow rest
- Face plate (500 mm)
- 4-position carriage stop
- Taper turning attachment
- 4-jaw independent chuck
- Steady rest 190~405 mm
- Digital read out
- Full length splash guard
- Center sleeve MT7 x MT5
- Dead center (MT5) 2 pcs